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# Plan for Educating Users

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# Overview

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- **The charge: Develop a plan to “empower” users so that they will be eager to analyze GLAST data.**
- **Categories:**
  - **Pre-launch meetings**
  - **Post-launch meetings**
  - **Practice data analysis**
  - **Proposal preparation tools**
  - **Investigator support**
- **The GSSC is willing to organize and coordinate presentations, and where needed to contribute speakers. But our efforts should not be regarded as stepping on anyone’s toes.**



## Pre-Launch Meetings

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- Presentations at meetings (AAS, HEAD, conferences) dealing not only with GLAST but specifics of the nature of the data and its analysis. As launch approaches these presentations should become more detailed.
  - For example, at the GRB 2003 conference in Santa Fe, there was a GLAST talk (Michelson) and posters on the LAT trigger (Bonnell *et al.*), the GBM (Bhat *et al.*), the GBM trigger (Band *et al.*) and analysis of LAT burst observations (Band *et al.*).
  - We need to plan presentations for the upcoming AAS meeting.
- Dedicated pre-launch workshop (similar to pre-CGRO workshop) to coincide with the release of the 1<sup>st</sup> NRA (~9 months before launch). Should include hands-on demonstrations.



## Post-Launch Meetings

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- **A workshop describing the observatory on-orbit. This workshop should focus heavily on the analysis system and proposal tools (it will be too early for many scientific results). The workshop should be timed for the release of the 2<sup>nd</sup> NRA (only 3 months into Phase 1!).**
- **Annual conferences (similar to the Compton and Huntsville conferences), timed for NRA releases. In the early years the analysis tools should be emphasized.**



## Practice Data Analysis

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- **Make tools available with simulated GLAST data and EGRET data before real GLAST data are available. The EGRET data and response functions are being converted into GLAST format. These tools are being released with the Data Challenges and thus the full set should be available before launch.**
- **Hands-on data analysis workshops every ~1/2 year (similar to Chandra's) starting the first year after launch.**



## Proposal Preparation Tools

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- Exposure maps from past observations—allows users to see what is available.
- Exposure prediction:
  - Tables predicting time to accumulate a specified exposure for both survey and pointed modes (averages over actual orbital constraints).
  - Tables for exposure accumulation considering orbit precession (does not require very accurate orbit simulator)
  - Orbit simulator for planning simultaneous observations. Make not be sufficiently accurate more than a few weeks in advance.
- Detectability tables—predicts exposure necessary to detect source of given strength.
- Observations simulator—may use analysis tools with real or simplified (for computational speed) response functions.



## Investigator Support

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- Online documentation—on GSSC website. Including the use, applicability and methodology of each tool.
- Analysis threads—on GSSC website. Scripts for standard operations. Will be updated by user contributions.
- Helpdesk—through GSSC website. Q&A will be logged.
- FAQ—posted on GSSC website. Based on Helpdesk Q&A.

**The GSSC website is posted:**

**[glast.gsfc.nasa.gov/ssc](http://glast.gsfc.nasa.gov/ssc)**